

Safety Data Sheet

Tinuvin® 384-2

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(30484350/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Tinuvin® 384-2

Recommended use of the chemical and restriction on use

Recommended use*: stabilizer, for industrial use only

Recommended use*: stabilizer

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: triazole, preparation

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Flam. Liq.	4	Flammable liquids
Aquatic Acute	2	Hazardous to the aquatic environment - acute
Aquatic Chronic	2	Hazardous to the aquatic environment - chronic

Label elements

Pictogram:

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Signal Word:
Warning

Hazard Statement:

H227 Combustible liquid.
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P273 Avoid release to the environment.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves and eye/face protection.

Precautionary Statements (Response):

P391 Collect spillage.
P370 + P378 In case of fire: Use water spray, dry powder or foam for extinction.

Precautionary Statements (Storage):

P403 + P235 Store in a well-ventilated place. Keep cool.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
127519-17-9	>= 75.0 - <= 100.0%	Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, C7-9-branched and linear alkyl esters
108-65-6	>= 1.0 - < 10.0%	1-methoxy-2-propylacetate

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

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If on skin:

Wash thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open. If irritation develops, seek medical attention.

If swallowed:

Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: Additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

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Methods and material for containment and cleaning up

Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Keep away from sources of ignition - No smoking.

Protection against fire and explosion:

Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Advice on system design:

Ensure adequate ventilation.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields. Wear face shield if splashing hazard exists.

General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form:	viscous, liquid	
Odour:	aromatic	
Odour threshold:	No applicable information available.	
Colour:	yellow	
pH value:	not determined	
Melting point:	< -29.4 °C	(Directive 92/69/EEC, A.1)
	Information based on the main components.	
Boiling point:	146.4 °C	
	Information applies to the solvent.	
Flash point:	74.5 °C	(Directive 92/69/EEC, A.9)

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Flammability:	Combustible liquid.	
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	360 °C	
Vapour pressure:	Information applies to the solvent. 0.000003 Pa (25 °C)	(Directive 92/69/EEC, A.4)
Density:	Information based on the main components. 1.07 g/cm ³ (20 °C)	(OECD Guideline 109)
Relative density:	Information based on the main components. approx. 1.07 (20 °C)	
Vapour density:	not determined	
Partitioning coefficient n-octanol/water (log Pow):	9.2 (20 - 25 °C)	(OECD Guideline 117)
Self-ignition temperature:	Information based on the main components. 415 °C	(Directive 92/69/EEC, A.15)
Thermal decomposition:	> 150 °C	
Viscosity, dynamic:	not determined	
Solubility in water:	< 0.18 mg/l (20 °C)	
Evaporation rate:	Information based on the main components. not determined	

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:
not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.
The product is chemically stable.

Conditions to avoid

Avoid electro-static discharge. Avoid sources of ignition.

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

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Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

> 150 °C

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: In animal studies the substance is virtually nontoxic after a single ingestion. In animal studies the substance is virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from the properties of the individual components.

Oral

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg (OECD Guideline 401)

The data on toxicology refer to the active ingredient.

Inhalation

Type of value: LC50

Species: rat

Exposure time: 4 h

not determined

Dermal

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg (OECD Guideline 402)

The data on toxicology refer to the active ingredient.

Irritation / corrosion

Assessment of irritating effects: Not irritating to eyes and skin. The product has not been tested. The statement has been derived from the properties of the individual components.

Skin

Species: rabbit

Result: non-irritant

Method: OECD Guideline 404

The data on toxicology refer to the active ingredient.

Eye

Species: rabbit

Result: non-irritant

Method: OECD Guideline 405

The data on toxicology refer to the active ingredient.

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Sensitization

Assessment of sensitization: No sensitizing effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Repeated exposure to high doses of the substance causes reversible liver changes in rodents. According to present knowledge, these effects do not occur in man. The data on toxicology refer to the active ingredient.

Genetic toxicity

Assessment of mutagenicity: In the majority of tests performed (bacteria/microorganisms/cell cultures) a mutagenic effect was not found. A mutagenic effect was also not observed in in-vivo assays. The product has not been tested. The statement has been derived from the properties of the individual components.

Carcinogenicity

Assessment of carcinogenicity: None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity

Assessment of reproduction toxicity: No data available.

Teratogenicity

Assessment of teratogenicity: No data available.

Symptoms of Exposure

Additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

LC50 (96 h) > 9.9 mg/l, Brachydanio rerio (OECD Guideline 203)

The ecological data given are those of the active ingredient.

Aquatic invertebrates

EC50 (48 h) 3.2 mg/l, Daphnia magna (OECD Guideline 202, part 1)

The ecological data given are those of the active ingredient.

Aquatic plants

EC50 (72 h) > 2 mg/l, Scenedesmus sp. (OECD Guideline 201)

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The ecological data given are those of the active ingredient. Tested above maximum solubility. No toxic effects occur within the range of solubility. No effects at the highest test concentration.

Chronic toxicity to fish

No data available.

Chronic toxicity to aquatic invertebrates

No data available.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

OECD Guideline 209 activated sludge/EC50 (3 h): > 100 mg/l

The ecological data given are those of the active ingredient.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Not readily biodegradable (by OECD criteria). The product has not been tested. The statement has been derived from the properties of the individual components.

Mobility in soil

Assessment transport between environmental compartments

No data available.

Additional information

Add. remarks environm. fate & pathway:

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. Do not discharge into drains/surface waters/groundwater.

Container disposal:

Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Dispose of in accordance with national, state and local regulations.

14. Transport Information

Land transport

USDOT

Classified as combustible liquid in containers greater than 119 gallons.

Sea transport

IMDG

Hazard class: 9

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Packing group: III
ID number: UN 3082
Hazard label: 9, EHS
Marine pollutant: YES
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains BENZOTRIAZOLE DERIVATIVE)

Air transport

IATA/ICAO

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHS
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains BENZOTRIAZOLE DERIVATIVE)

Further information

Not dangerous goods of class 3 in packages up to 450 litres capacity (valid for ADR, ADNR, RID, TDG and USDOT).

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

NFPA Hazard codes:

Health: 2 Fire: 2 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2019/08/30

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